

*H. Russell B. Witte Jr.*

IDENTIFICATION  
of  
U. S. ARMY AIRCRAFT  
covering  
DESCRIPTION AND AVAILABLE INFORMATION  
on  
SPECIFICATIONS AND PERFORMANCE  
of  
34 IMPORTANT TYPES

Prepared by Department of Military Science  
Air Corps Replacement Training Center,  
AIRCREW SCHOOL,  
Maxwell Field, Alabama.

IDENTIFICATION

OF

U. S. AIR FORCE

PERSONNEL

IDENTIFICATION AND ANALYSIS

OF PERSONNEL

OF

AIR FORCE

Prepared by the Department of Military Science

and the Department of Military History

at the Air Force

Research Institute



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✓ SEVERSKY - P-35 - 1 PLACE PURSUIT OR FIGHTER (obsolete)

Description.

Wings: Low wing monoplane - straight leading edge, rounded trailing edge, short and stubby.

Engine: Single - radial - aircooled.

Fuselage: Short and chunky with blunt and stubby nose; enclosed cockpit over center of wing - retractable landing gear with noticeable bulge.

Tail: Rounded stabilizer, rounded elevator, high fin.

Specifications: 950 HP single radial engine - span 36 feet, length 23 1/2 feet.

Performance: Over 300 MPH. Armed with machine guns.

✓ CURTIS - P-36 - 1 PLACE PURSUIT OR FIGHTER. (BRITISH NAME, MOHAWK)  
(obsolete)

Description:

Wings: Low wing monoplane, straight leading edge, tapered trailing edge, short and stubby, slightly dihedral.

Engine: Single - radial - air cooled.

Fuselage: Short and chunky, stubby, blunt nose, enclosed cockpit, retractable landing gear and tail wheel.

Tail: Rounded stabilizer, rounded elevator, high fin. knee like bulges on leading edge of wing caused by landing gear

Specifications: Span 37 feet - length 29 feet - height 9 1/2 feet. Empty weight 4541 lbs. Useful load 1190 lbs. Gross weight 5731 lbs. Fuel 163 gals. Engine, single Wright Cyclon 1000 HP.

Performance: Maximum speed 323 MPH at 15,000 feet. Cruising speed 262 MPH. Landing speed 69 MPH. Service ceiling 32,700 feet. Absolute ceiling 33,600 feet. Cruising range 1003 miles, armament machine guns,



STATION - 100 - 1 PLACE FRONT IN FRONT

Description:  
The wing structure is a simple rectangular shape, rounded at the ends, with a flat roof. The structure is made of a material that appears to be a light-colored, possibly concrete or stone, with a smooth finish. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide.

STATION - 100 - 1 PLACE FRONT IN FRONT (REVERSE SIDE, FRONT)

Description:  
The wing structure is a simple rectangular shape, rounded at the ends, with a flat roof. The structure is made of a material that appears to be a light-colored, possibly concrete or stone, with a smooth finish. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide.

Description:  
The wing structure is a simple rectangular shape, rounded at the ends, with a flat roof. The structure is made of a material that appears to be a light-colored, possibly concrete or stone, with a smooth finish. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide. The structure is located in a flat, open area with no other structures nearby. The structure is oriented horizontally, with the front facing the viewer. The structure is approximately 100 feet long and 10 feet wide.



✓ LOCKHEED - P-38 - 1 PLACE INTERCEPTOR PURSUIT - BRITISH NAME, LIGHTNING.

Description:

Wings: Midwing monoplane, slightly dihedral, swept back leading edge, tapered trailing edge, long and narrow.

Engine: Twin-engine, each in separate fuselage.

Fuselage: Twin fuselage - each elongated & streamlined extending almost to point in rear. Rounded noses. Enclosed cockpit in nacelle, short but streamlined extending only width of wings to rear but several feet in front of propellers. Retractable tricycle landing gear.

Tail: Twin tail booms, medium high, straight edge stabilizers, straight edge elevators. Fins and rudders extend below fuselages.

Specifications: Two, liquid cooled, Allison in line 1200 HP Engines. Span 58 1/2 feet, length 42 feet. Has turbo superchargers.

Performance: Well over 400 M.P.H., landing speed 100 M.P.H. armament machine guns, contemplate 2 - 37 mm. cannons. One of 2 fastest ships in the world. Frail in looks but very strong in performance.

✓ BELL AIRACOBRA - P-39, P-39-A, P-39-C - P-39-D. 1 PLACE INTERCEPTOR PURSUIT - BRITISH NAME, CARIBOU.

Description:

Wings: Low wing, slightly sweptback and rounded, short and stubby, slightly dihedral.

Engine: Single, located in rear of cockpit.

Fuselage: Elongated and streamlined, long slender pointed nose, Enclosed cockpit over front center of wing. Retractable tricycle landing gear.

Tail: Sweptback stabilizer, rounded elevator, medium high fin and rudder.

Specifications: Span 34 feet - length 30 feet, height 9 1/4 feet. Empty weight 4955 lbs. useful load 1707 lbs., gross weight 6662 lbs. Fuel 140 gals. Allison in-line engine, 1090 HP.

Performance: 400 MPH, landing speed 100 M.P.H. Armament one 37 mm. cannon in propeller shaft. 4 machine guns on each wing and 4 in nose. Claimed to have the most fire power of any pursuit ship.







✓ CURTIS P-40 to P-40-F. 1 PLACE INTERCEPTOR - PURSUIT - BRITISH NAME, TOMAKAWK.

Description:

Wings: Low wing monoplane, slightly dihedral, straight leading edge, tapered trailing edge, medium short and stubby.

Engine: Single, in-line, liquid cooled.

Fuselage: Elongated and streamlined, fairly long tapered nose, enclosed cockpit over rear center of wing, retractable landing gear and tail wheel, bulge under front.

Tail: Sweptback stabilizer, rounded elevator, medium high fin, and rudder.

Specifications: Span 37 feet, length 32 feet, height 10 1/2 feet, empty weight 5391 lbs., useful load 1408 lbs., gross weight 6799 lbs. Fuel 120 gals, oil 13 gals. Single Allison in-line engine 1000 HP. P-40-F has Rolls-Royce Merlin engine 1105 H.P. All latest types heavily armored with leak proof gas tanks.

Performance: 370 MPH at 20,000 ft. British rate better than Messerschmitt. Armament: 4 - 30 cal. and 2 - 50 cal. machine guns. Latest types reported armed with 12 machine guns and 2 - 20mm. cannon.

✓ REPUBLIC P - 43 - 1 PLACE INTERCEPTOR \* BRITISH NAME, LANCER

*Discontinued in favor of P-47*

Description:

Wings: Low wing monoplane, straight leading edge, rounded trailing, short and stubby, slightly dihedral.

Engine: Single - radial - aircooled.

Fuselage: Short and chunky, with blunt and stubby nose, enclosed cockpit over center of wing, retractable landing gear.

Tail: Sweptback stabilizer, rounded elevator, low fin and rudder.

Specifications: Span 36 feet, length 28 1/2 feet; height 10 feet, empty weight 5627 lbs., useful load 1528 lbs., gross weight 7155 lbs. Fuel 145 gals., oil 13 gals.

Performance: Maximum speed 375 MPH at 23,000 feet, cruising speed 310 MPH. Landing speed 86 MPH. Climb 3380 ft. per minute. Cruising range 960 miles.



COPIES 1-10 of 1-10-1, 1 PLACE INTERCEPT - PRESENT - 5 BIRTH DATE  
TO NAME

Description:

Wings: Low wing monoplane, slightly dihedral, straight leading  
edge, tapered trailing edge, medium chord and stubby.

Engine: Single, in-line, liquid cooled.

Fuselage: Monocoque and semi-monocoque, fairly long narrow nose,  
enclosed cockpit over rear section of wing, retractable  
landing gear and tail wheel, balance wheel forward.

Tail: Sweptback stabilizer, rounded elevator, medium high fin,  
a fin rudder.

Specifications: Span 37 feet, length 32 feet, height 10 1/2 feet, empty  
weight 1200 lbs., useful load 1100 lbs., gross weight  
2300 lbs., max. speed, 115 mph., max. climb, 1000 ft./min.  
max. altitude, 10,000 ft., max. range, 1000 miles.  
max. fuel capacity, 100 gallons. Max. fuel capacity, 100 gallons.  
Max. fuel capacity, 100 gallons.

Performance: 370 mph at 20,000 ft. British rate better than 1000 mph.  
Altitude: 1 - 30,000 ft. and 2 - 30,000 ft. machine gun. Landing  
speeds to crest with 12 machine guns and 2 - 30 mph.  
Guns.

Interception:

REPORT 1 - 10 - 10 - 1 PLACE INTERCEPT - BIRTH DATE, NAME

Description:

Wings: Low wing monoplane, straight leading edge, tapered trail-  
ing, short and stubby, slightly dihedral.

Engine: Single - radial - air-cooled.

Fuselage: Short and stubby, with long and stubby nose, enclosed  
cockpit over center of wing, retractable landing gear.

Tail: Sweptback stabilizer, rounded elevator, low fin and rudder.

Specifications: Span 30 feet, length 25 1/2 feet, height 10 feet, empty  
weight 800 lbs., useful load 1200 lbs., gross weight  
2000 lbs., max. speed, 115 mph., max. climb, 1000 ft./min.  
max. altitude, 10,000 ft., max. range, 1000 miles.

Performance: 1000 mph at 20,000 feet, cruising speed 310  
mph, landing speed 60 mph. Climbed 3700 ft. per minute.  
Cruising range 500 miles.



REPUBLIC - P-47 - 1 PLACE INTERCEPTOR - BRITISH NAME, THUNDERBOLT.

Description:

Wings: Low wing monoplane, straight leading edge, rounded trailing edge, rounded tips, short and stubby.

Engine: Single, aircooled, 4 bladed propellor.

Fuselage: Short and chunky, blunt and stubby nose, enclosed cockpit just back of wing. Retractable landing gear. tail wheel

Tail: Swept back stabilizer, rounded elevator, low fin and rudder.

Specifications: Single radial air cooled engine - 2000 HP.

Performance: Well over 400 MPH. Claimed to be heavier than a battleship - considering size, - and most powerful engine fighter in U. S., one of two fastest ships in the world. Service ceiling 40,000 ft. with turbo-superchargers.

BELL ATRACUDA - MULTIPLACE FIGHTER - XFM - 1A

Description:

Wings: Midwing monoplane, sweptback leading edge, rounded tip, straight trailing edge, long and narrow, slightly dihedral. Nacelles extend in front of wings.

Engines: Twin - pusher type - gun turret in nose of each nacelle.

Fuselage: Long, with rounded nose, enclosed cockpit in nose, gun turret in nose of each nacelle. Retractable landing gear.

Tail: Sweptback stabilizer, straight elevator, high fin and rudder.

Specifications: Two, Allison liquid cooled engines, 1500 HP. Span, 70 feet, length 45 feet.

Performance: 400 MPH. Contemplate using cannons in each nacelle besides machine guns. This ship still in experimental stage.





## BOMBERS

### LIGHT BOMBER, NORTHROP A-17-A, 2 PLACE

*(obsolete)*

#### Description:

Wings: Low wing monoplane, slightly dihedral, slightly swept-back leading edge, tapered trailing edge, rounded tips, short and wide from front to rear.

Engine: Single, air cooled. *(only single engine light bomber)*

Fuselage: Short, with blunt and stubby nose, enclosed cockpits, A-17 fixed landing gear, A-17A - retractable landing gear.

Tail: Sweptback stabilizer, tapered elevator, medium fin and rudder. Long span stabilizes and elevator.

Specifications: Span 47 1/2 feet, length 31 1/2 feet.

Performance: Obsolescent type - number turned over to Great Britain at beginning of war. - Used in their reserve then, now being used for general reconnaissance and for advanced training.

### LIGHT BOMBER, CURTIS A-18 - MULTIPLACE

*Better than A17 + A17A but superseded by A20*

#### Description:

Wings: Midwing monoplane, sweptback, leading edge, straight trailing edge, rounded tips, long and fairly narrow, Nacelles come to center of wings.

Engine: Two - air cooled - radial.

Fuselage: Long and narrow rounded nose extending beyond propellers, enclosed cabin, retractable landing gear.

Tail: Sweptback stabilizer, tapered elevator, rather high fin and rudder.

Specifications: Span 61 feet, length 38 1/2 feet.

Performance:





LIGHT BOMBER - DOUGLAS A-20, A-20-A BRITISH NAME THE HAVOC AND THE BOSTON. *standard - in production*

Description.

Wings: High wing monoplane, straight leading edge, tapered trailing edge, rounded tips, long and narrow, very slightly dihedral.

Engine: Two. Nacelles extend beyond trailing edge of wings.

Fuselage: Elongated and streamlined, long, slender, rounded nose, extends 10' in front of propellers, top extends to form gun turret, enclosed cabin, retractable tricycle landing gear.

Tail: Sweptback stabilizer, rounded elevator, high fin and rudder. *typical of Douglas tails*

Specifications: Two Pratt and Whitney Engines, 1600 H.P. each. Span 65 feet, length 50 feet.

Performance: Max. speed 320 miles per hour - range 1200 miles - British use for night fighting as many as 12 machine guns in nose.

MEDIUM BOMBER - MARTIN B-26 - MULTIPLACE \* BRITISH NAME MARAUDER.

Description:

Wings: High wing monoplane, sweptback leading edge, tapered trailing edge, fairly narrow.

Engine: Twin with rounded pointed nose - 4 bladed propeller, extra heavy cuffs on hubs.

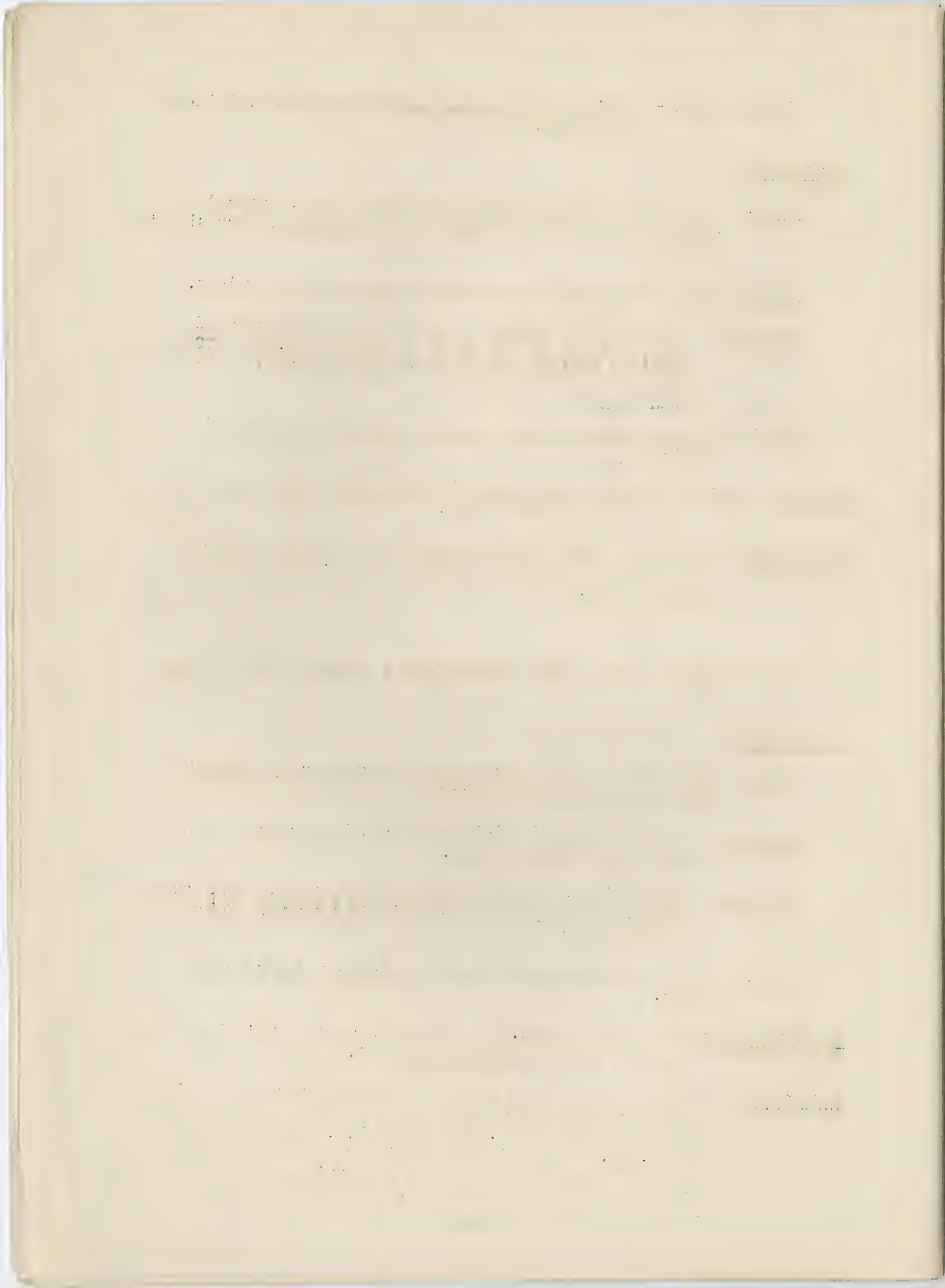
Fuselage: Streamlined, long and narrow with rounded nose, gun turret in nose, enclosed cabin, retractable tricycle landing gear. *stinger turret extending beyond tail*

Tail: Sweptback stabilizer, rounded elevator, high fin and rudder.

Specifications: Two cyl. 1850 h.p. engines. Wing span 65', Length 58', Height 20', Stabilizer span 24'.

Performance: Faster and deadlier than most current pursuits. Built since British Baltimore, along same lines except faster and more streamlined. 350-375 M.P.H. Landing speed 110 M.P.H. Armed with 12 machine guns - Power turret on top. Turret in tail, nose and auxiliary turrets in side. Highly maneuverable for a bomber. Carries approximately 2 ton. bombs.





MEDIUM BOMBER - NORTH AMERICAN B-25, B-25A, B-25-B, 5 PLACE

Description:

Wings: Midwing, rounded tips, slightly sweptback leading edge and tapered trailing edge. Nacelles extend beyond trailing edge of wings.

Engine: Two

Fuselage: Long and thick bodied, rounded, slightly shark shaped nose. Gun turrets in nose and tail. Enclosed cabin. Retractable tricycle landing gear.

Tail: Tapered twin tail booms and fins.

Specifications: Span 67 1/2 feet, length 51 1/2 feet, height 15 feet, empty weight 16,000 lbs. Gross weight 24,000 lbs. Fuel 916 gals. Two Wright cyclone engines, 1350 h.p. Latest types reported to have 1700 h.p. motors.

Performance: Max. speed, 308 m.p.h. at 13,000 ft. cruising speed 243 m.p.h. Landing speed 84 m.p.h. Service ceiling 25,400 feet. Climb 1880 feet per min. Range 2650 miles. Power turret on top of fuselage.

MEDIUM BOMBER - DOUGLAS B-18, B-18A, BRITISH NAME SIGBY.

Description:

Wings: Midwing, monoplane, swept back leading edge, straight trailing edge, elliptical tips, long and fairly narrow, slightly dihedral.

Engines: Two

Fuselage: Long and thick bodied; B-18 has smoothly rounded nose; B-18A, has shark nose; Gun turrets in nose and on top of fuselage. Closed cabin, retractable landing gear.

Tail: Sweptback stabilizer, straight elevator, high fin and rudder.

Specifications: Span 95 feet, length 60 feet.

Performance: Oldest type of medium bombers now in use.



VOL. LXXV. PART I. 1945.

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THE JOURNAL OF THE  
ROYAL ANTHROPOLOGICAL INSTITUTE

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## MEDIUM BOMBER, DOUGLAS B-23

### Description.

Same as B-18 except for slimmer fuselage, more pointed nose, higher fin, rounded wing tips and slight bulge under front center of fuselage.

## HEAVY BOMBER CONSOLIDATED, B-24, B-24A, 6 to 9 PLACE. BRITISH NAME LIBERATOR

### Description.

Wings: Highwing monoplane, sweptback leading edge, tapered trailing edge, rounded tips, long and narrow.

Engines: Four

Fuselage: Rather short thick body when compared with wing spread of over 100 feet, shark nose, enclosed cabins, retractable tricycle landing gear.

Tail: Twin tail booms, straight elevator, fairly high fins and rudders.

Specifications: Four Pratt and Whitney twin wasp engines, 1250 H.P.  
Span 119 feet, length 70 feet. Gross wt. 40,000 lbs.  
Height 19'.

Performance: Over 300 M.P.H. Bomb capacity 8,000 lbs. Range 3,000 miles. Heavily armed with machine guns. Tail turret.



817 B - Blisters on side

817 C - No blisters on side just on slide panel  
bathtub underneath

817 E - Blister on side & underneath  
stays on tail  
on tail and side  
small slide panel changed to two sections  
spring

819 low span of wing part 2<sup>nd</sup> motor

2<sup>nd</sup> wing part

32 lbs weight

40 lbs weight

15 lbs of camp

15 lbs on tail

Shore type 202

HEAVY BOMBER - BOEING FLYING FORTRESS, B-17, B-17B, B-17C, B-17E, 7 to 9  
PLACE - and B-17D, BRITISH NAME FORTRESS.

Description.

Wings: Sweptback leading edge, tapered trailing edge, rounded tips, long and fairly narrow, slightly dihedral.

Engines: Four

Fuselage: Long and thick bodied, rounded stubby nose, gun turrets in nose, on each side and under fuselage in rear of wings. Enclosed cabins, retractable landing gear and tail wheels.

Tail: Sweptback stabilizer, slightly rounded elevator, high fin and rudder.

Specifications: Span 104 feet, length 68 feet, height 15 1/2 feet, empty weight 31,150 lbs., useful load 16,350 lbs. Gross weight 47,500 lbs. Fuel 1700 gals., oil 180 gals. 1650 HP engines.

Performance: Max. speed 325 m.p.h. Service ceiling 36,700 feet. Rate of climb 2,260 feet per minute. Max. range 3500 miles. Power turrets both top and bottom. Ceiling 40,000 ft.

B-17E just built, more streamlined and heavier armed, has gun turret in tail, 5 ft. longer, greater gross weight and revolutionized type of tail.

~~STINSON~~ O-46 A (OBSERVATION) MULTI-PLACE  
DOUGLAS

Description.

Wings: Parasol - wing monoplane, sweptback leading edge and rounded trailing edge. Short and stubby wing.

Engine: Single-engine, radial, air-cooled.

Fuselage: Long and narrow with long blunt nose. Enclosed cockpit back of wing. Fixed landing gear.

Tail: Sweptback stabilizer, tapered elevator, high fin and rudder.

Specifications: Span 38 feet, length 27 feet.

Performance:





## STINSON O-49 (OBSERVATION AND LIAISON) MULTI-PLACE

### Description:

Wing: High-wing monoplane, Straight leading and trailing edges. Wings extended inward only to cockpit. Long wing, rounded tips.

Engine: Single-engine, radial, air cooled.

Fuselage: Medium long and tapered. Blunt and stubby nose. Enclosed cockpit which enables observer to see over and under wing. Fixed landing gear.

Tail: Sweptback stabilizer, tapered elevator, medium high fin and rudder.

Specifications: Single, Lycoming engine, 280 H.P. 51 wing span-32' long, 9'4" high.

The Stinson O-54 has very low minimum speed seems to almost hover in air. Has 34' wing span and 80 H.P. Continental Engine.

## RYAN YO-51 (OBSERVATION - LIAISON) MULTI-PLACE

### Description.

Wing: Parasol-wing monoplane. Straight leading and trailing edges. Long wing.

Engine: Single-engine, radial, air-cooled.

Fuselage: Long and very narrow. Blunt and stubby nose. Open cockpits. Fixed landing gear.

Tail: Sweptback stabilizer and rounder elevator. Very large tail and very high fin and rudder.

Specifications: 420 H.P. Pratt and Whitney, 9 cyl. radial engine. 52' wing span - 34 1/2' long, height 11'.

Performance: Can land in small rough areas. Used to carry commanders above for observation. Not fast but highly maneuverable. Capable of short landing and quick take off. Spoken of as the flying motorcycle.





NORTH AMERICAN O-47A, O-47B (OBSERVATION) MULTI-PLACE

Description.

Wing: Mid-wing monoplane, straight leading edge, tapered trailing edge, and rounded tips. Long and stubby wing, slightly dihedral.

Engine: Single-engine, radial, air-cooled.

Fuselage: Medium long and tapered fuselage, blunt and stubby nose. Enclosed cockpit extending from front to rear of wing. Retractable landing gear and tail wheel. Bulge under center.

Tail: Sweptback stabilizer, rounded elevator, medium high fin and rudder. Tail of fuselage extends well out over edge of elevator.

Specifications : Span 49 feet, length 34 1/2 feet. 975 H.P. Wright cyclone radial engine. Room for 3 men. Speed 243 M.P.H. standard observation ship.

CURTIS O-52 OBSERVATION - MULTI-PLACE

Description.

Wing: Parasol-Type Monoplane. Straight leading and trailing edge with slightly rounded tips. Strut braced.

Engine: Single engine, radial, air-cooled.

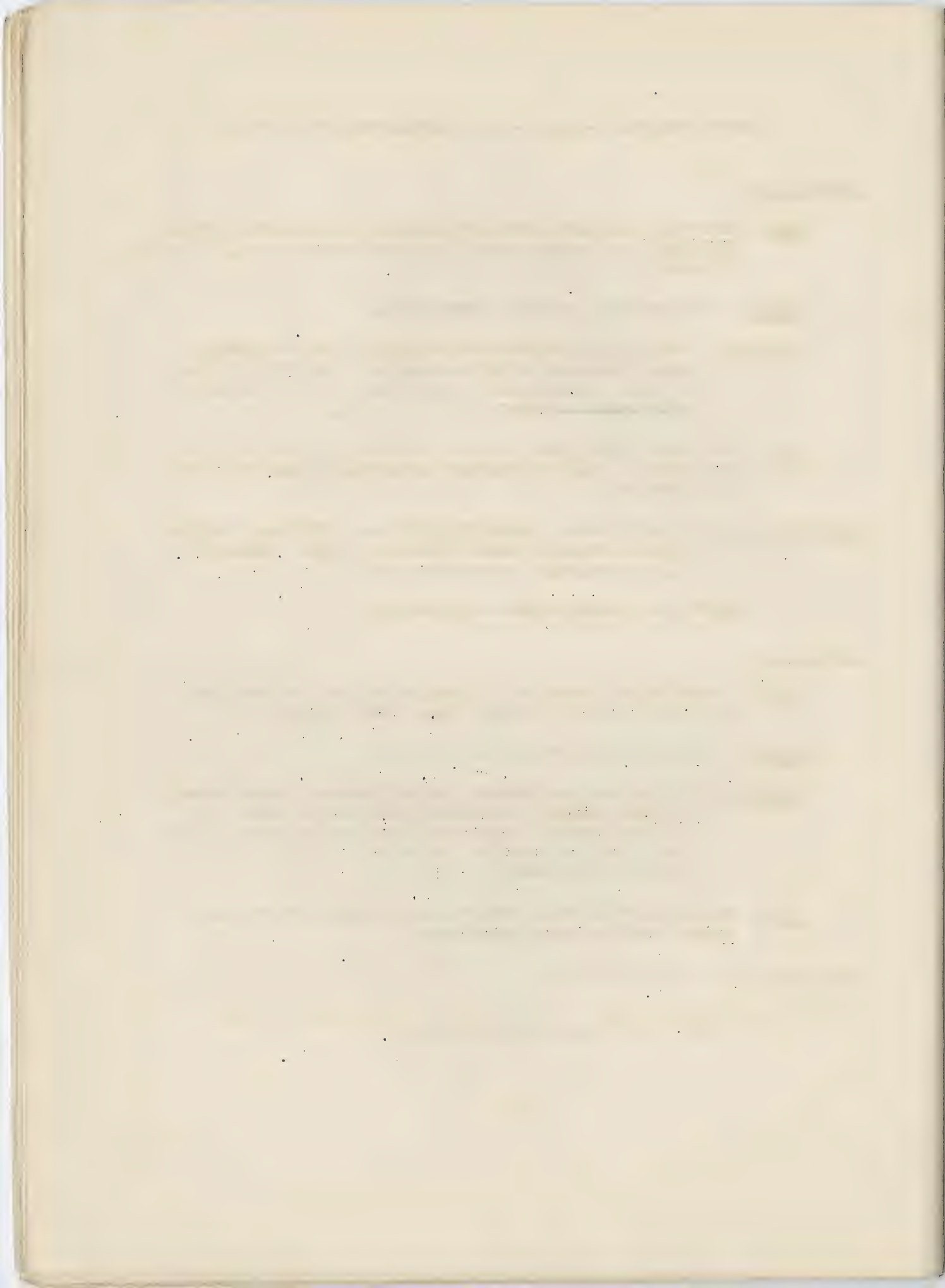
Fuselage: Medium long and tapered, with blunt and stubby nose, Enclosed cockpit extending front leading edge to several feet in rear of trailing edge of wing. Wing touches top of cockpit. Retractable landing gear with fuselage. but fixed tail wheel.

Tail: Sweptback stabilizer straight elevator. High fin and rudder and long span stabilizer.

Specifications: Room for 3 men.

Performance: Equipped with machine guns. Slightly smaller than O-47A but compares favorably with it.





DOUGLAS C-38, C-39, C-41, C-41A, C-42 (TRANSPORT) C-47

Description:

Wing: Low wing cabin monoplane, sweptback leading edge, straight trailing edge, and rounded tips. Long and narrow wing, slightly dihedral.

Engine: Twin-engine, radial, air-cooled.

Fuselage: Long and streamlined fuselage, long rounded nose, *with cockpit*, retractable landing gear.

Tail: Sweptback stabilizer, straight elevator, high fin and rudder.

Specification: Span 85 feet, length 62 feet, on C-47 - two air cooled radial engines 1,200 h.p.

Performance: C-47 - carries two tons of freight plus crew and full equipment - cruising speed nears 200 m.p.h. maximum range 1,500 miles.

New transport being built, Curtis C-20 has same performance and carries seven tons of freight.

LOCKHEED C-40 AND C-40A (TRANSPORT)

Description:

Wing: Low-wing cabin monoplane. Sweptback leading edge, tapered trailing edge, and rounded tips. Long and narrow wing, slightly dihedral.

Engine: Twin-engine, radial and air-cooled.

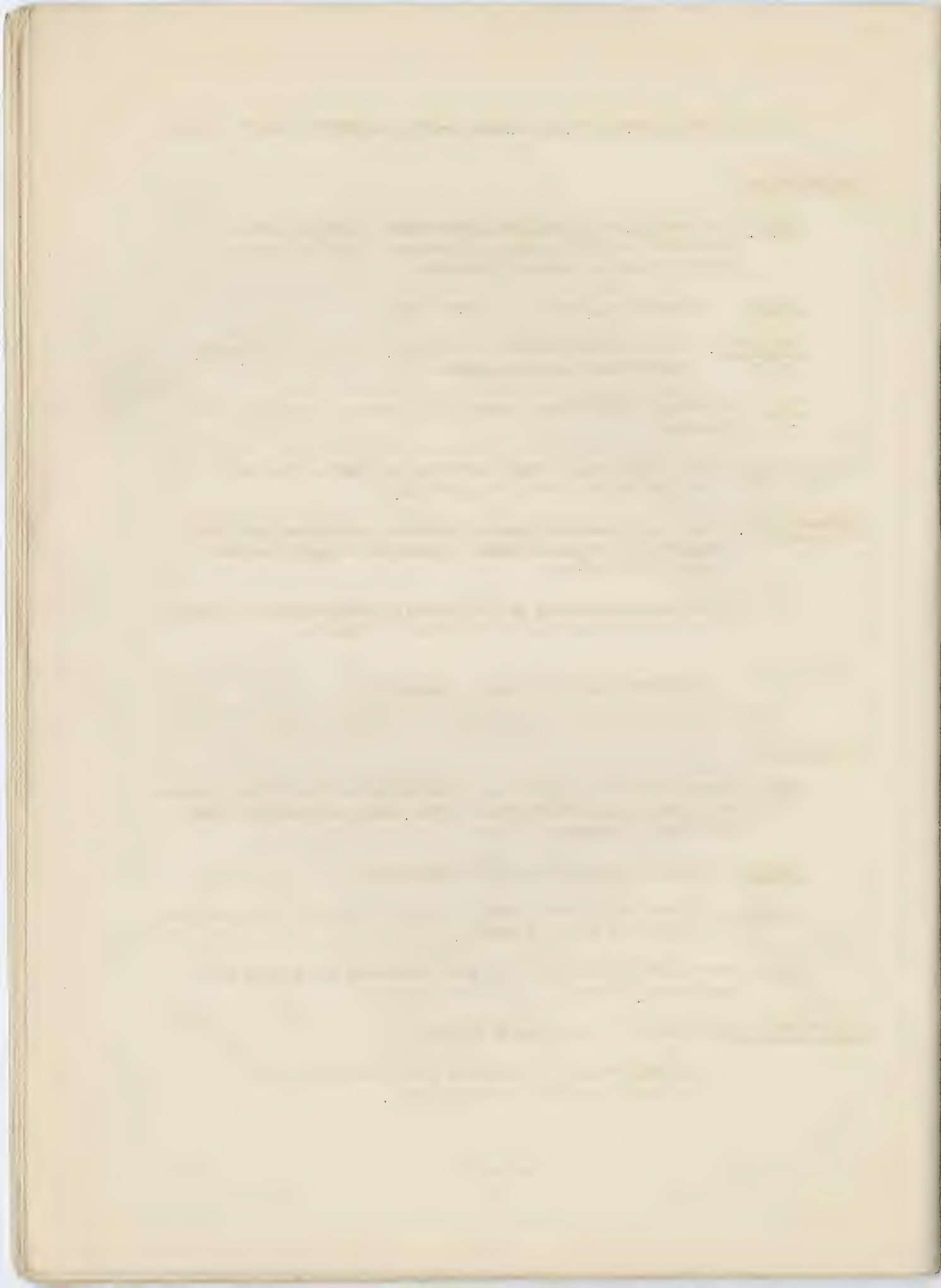
Fuselage: Short and chunky fuselage, long rounded nose, and retractable landing gear.

Tail: Sweptback stabilizer, tapered elevator, twin boom tail surfaces, medium high fin and rudder.

Specifications: Span 49 feet, length 34 feet.

Beechcraft AT 7 - used as light transport and trainer for Aerial Navigation.





ADVANCED TRAINER, NORTH AMERICAN AT-6A, 2 PLACE, BRITISH NAME HARVARD

Description:

Wings: Low-wing monoplane, sweptback leading edge, straight trailing edge, nearly square tips, slightly dihedral.

Fuselage: Short and chunky, blunt and stubby nose, enclosed <sup>double</sup> cockpit, retractable landing gear.

Engine: Single, air cooled, radial, 2 bladed propellor.

Tail: Rounded stabilizer, rounded elevator, rudder extends out beyond elevator, medium high fin and rudder.

Specifications: Span 42 feet, length 29 feet, height 8 3/4 feet, empty weight 3958 lbs. Gross weight 5260 lbs. Fuel 111 gals., oil 10 gals. Engine Pratt and Whitney Wasp 550 H.P.

Performance: Maximum speed 206 m.p.h., cruising speed 180 m.p.h., landing speed 66 m.p.h., service ceiling 23,000 feet, climb 1350 feet per min. Cruising range 730 miles.

BASIC TRAINER - VULTEE BT 13, NORTH AMERICAN BT 14 - 2 PLACE

Description.

Wings: Low wing monoplane, sweptback leading edge, tapered trailing edge, rounded tips, slightly dihedral.

Engine: Single, air cooled <sup>rounded</sup> radial, 2 blade propellers.

Fuselage: Short and chunky with blunt and stubby nose, en-closed <sup>double</sup> cockpit, fixed landing gear.

Tail: Sweptback stabilizer, tapered elevator. Medium high fin and rudder.

Specifications: Span 42 feet, length 28 1/2 feet, height 9 feet, empty weight 2976 lbs., gross weight 2991 lbs., fuel 92 gals., oil 8 1/2 gals., single 450 h.p. engine.

Performance: Maximum speed 182 m.p.h. Cruising speed 170 m.p.h. at 5000 feet. Landing speed 53 m.p.h. Service ceiling 21,000 feet. Time to climb 3280 feet, 2 - 1 mins. Cruising range 730 miles.





PRIMARY TRAINER, RYAN PT AND PT-16 - TWO PLACE

Description.

Wings: Low wing monoplane, straight leading and trailing edges with slightly rounded tips, slightly dihedral.

Engine: Single, radial, liquid cooled with cyliner heads protruding around nose on PT 21.

Fuselage: Long, rounded and tapering with rounded pointed nose, open cockpits, fixed landing gear.

Tail: Rounded stabilizer and elevator, high and wide fin, high rudder.

Specifications:

Performance: Latest primary trainer.

PRIMARY TRAINER - STEARMAN PT 13 AND PT 17 - TWO PLACE

Description.

Wings: Biplane, straight leading and trailing edge, short and stubby.

Engine: Single, air-cooled radial.

Fuselage: Short and chunky with blunt and stubby nose, open cockpits, fixed landing gear.

Tail: Sweptback stabilizer, tapered elevator, high fin and rudder.

Specifications: Span 32' 2", length 25', height 9' 4 1/2", Gross weight 2635 lbs., fuel 46 gals., oil 4.4 gals.  
P-17 has 220 H.P. Continental engine, P 13 has Lycoming engine.

Performance: Maximum speed 123 M.P.H. Cruising speed 96 MPH.  
Landing speed 60 MPH. Rate of climb 960 feet per min.  
Service ceiling 13,200 feet absolute ceiling 14,700 feet. Range 390 miles.





PRIMARY TRAINER, WACO PT-14 - ST-LOUIS PT - TWO PLACE

Description.

Wings: Biplane, straight leading and trailing edge, short and stubby.

Engine: Single, air-cooled radial.

Fuselage: Short and chunky with blunt and stubby nose, open cockpits, fixed landing gear.

Tail: Sweptback stabilizer, tapered elevator, high fin and rudder.

Specifications: Span 33 feet, length 26 1/2 feet, height 9 1/2 feet, empty weight 2059 lbs., gross weight 2766 lbs. Fuel 41 gals., oil 4 gals. 285 h.p. engine.

Performance: Maximum speed 130 m.p.h., cruising speed 116 m.p.h., landing speed 53 m.p.h., climb 1000 feet per min., service ceiling 15,000 feet, range 350 miles.

CURTISS AT - 9 - ADVANCE TRAINER

Wings: Low-wing monoplane, slightly sweptback leading edge, straight trailing edge, rounded tips.

Engine: Twin-engine - Nacelles extend only to trailing edge of wings. Radiators make slight bulge beneath each nacelle.

Fuselage: Elongated and highly streamlined, fairly long, blunt rounded nose, enclosed cabin, two seats side by side, with provision for two additional observer's seats immediately back of the pilots. Retractable landing gear, stationary tail wheel.

Tail: Sweptback stabilizer, rounded elevator, high fin and rudder.

Specifications: Two Curtiss 280 HP, radial air-cooled engines.

Performance: Top speed in excess of 200 MPH. Designed to provide a new and quicker step from single engined trainers to speedy pursuit or multi-engined bombers.



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# AIRCRAFT IDENTIFICATION

DESIGNATION      MAKE      DISTINGUISHING CHARACTERISTICS

## PURSUIT SHIPS - single place

P-35      Republic      retractable landing gear that makes noticeable bulge

P-36      Curtiss      knee-like bulge on leading edge caused by landing gear.

P-38      Lockheed      Twin fuselage

P-39  
A, C, D      Bell      long slender pointed nose tri-cycle landing gear.

P-40, P-40F      Curtiss      fairly long tapered nose, and bulge made by ~~engine~~<sup>radiators</sup> under front.

P-43      Republic      short and chunky with blunt stubby nose, and enclosed cockpit over low wing.

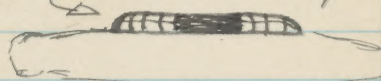
P-47      Republic      4 bladed propeller, retractable tail wheel, otherwise like P-43

## ~~F~~ MULTIPLACE FIGHTER

XF-11A      Bell      Twin, pusher type motors.

Designation : Make : Distinguishing Characteristic

LIGHT BOMBERS - twin motors, double enclosed cockpit



A17, A17A Northrop Low wing monoplane, single engine  
A17 has fixed landing gear.

A18, A18A Curtis narrow rounded nose extending a  
little beyond propellers.

A20, A20A Douglas rounded nose extending 10' in front of  
propellers, tricycle landing gear.  
A20 has spinners on props.

~~XXXXXXXXXX~~ ~~XXXXXXXXXX~~ MEDIUM BOMBERS-

B18-B18A Douglas Long & thick bodied, B-18-smoothly  
rounded nose, B-18A - shark nose.

B23 Douglas Same as B18 except for slimmer shallower  
fuselage, more pointed nose and slight  
bulge under front center of fuselage.

~~XXXXXXXXXX~~

B25 N. American twin tail, tricycle landing gear.  
A+B

B26 Martin single tail, rounded nose extending beyond  
front of props, tri cycle landing gear  
stinger turret extending beyond tail.